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KENNEDY SPACE CENTER, FLORIDA 32899

REPLY TO  
ATTN OF: AA-PCO-2

DEC 23 1970

TO: Distribution

FROM: Manager, Apollo-Skylab Programs, AA

SUBJECT: Skylab Program Directive SLPD #50, "Identification of Nonflight Hardware," dated November 23, 1970

The attached SLPD #50 is provided for your information. A copy of the briefing note to the Center Director is attached to provide you with a summary of the impact of the directive on the Center.

*Thomas W. Morgan*  
Thomas W. Morgan  
Brigadier General, USAF

Enclosure:  
(1) SLPD #50  
(2) Briefing Note

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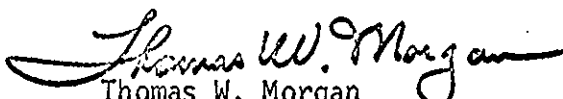
BRIEFING NOTE TO: Dr. Debus

DEC 23 1970

SUBJECT: Skylab Program Directive #50, "Identification of Nonflight Hardware"

The subject directive dated November 23, 1970, has been received by this office. Our review of this directive indicates no changes are required in the KSC implementing directive, KPD 8610.1 "Control of Nonflight Hardware."

This SLPD No. 50 will be given standard distribution to heads of primary and secondary organizations, along with a copy of this briefing note.

  
Thomas W. Morgan  
Brigadier General, USAF

NOV 23 1970

SKYLAB  
PROGRAM DIRECTIVE NO. 50

TO : DISTRIBUTION

FROM:

  
DIRECTOR, SKYLAB PROGRAM

SUBJECT: IDENTIFICATION OF NONFLIGHT HARDWARE

I. PURPOSE

The purpose of this directive is to establish uniform requirements for identification, marking and control of nonflight hardware.

II. SCOPE

This directive is applicable to all nonflight hardware temporarily installed in a module of the Skylab Space Vehicle.

III. EFFECTIVITY

The requirements for use of streamers and controls contained in this directive shall be implemented on all Skylab Space Vehicles except that the Launch Vehicle Stages will continue to use that system of control which is currently in effect on the Apollo Program at KSC.

The requirements for coloring hardware itself shall be phased into existing procedures on a basis of non-interference to hardware already identified and marked.

All new contracts, or contracts and procurements in process and not yet producing hardware, shall reflect the total requirements of this directive.

IV. RESPONSIBILITIES

All NASA Skylab Program Offices or their delegated representatives shall be responsible for implementation of the requirements established by this directive. It shall be the responsibility of these offices to assess current practices for compliance with this directive and, where indicated, take necessary action to change existing practices to effect compliance. Deviations to this directive will require Skylab Program Office approval.

V. DEFINITION

Nonflight Hardware - Hardware which is similar to flight hardware in design, fabrication, function, and/or physical appearance, and other hardware used to support test and checkout activities which could be accidentally substituted for flight articles. This includes test hardware used as a temporary installation in flight hardware, hardware which has been downgraded from flight status to ground checkout status (such as ground test batteries), and protective devices (such as dust covers, caps and tape). Dummy/inert explosive devices and charged explosive devices not intended for flight are not to be covered by this directive.

VI. REQUIREMENTS

A system shall be established to identify, mark and control nonflight hardware to preclude inadvertent or unauthorized usage as flight hardware. Specified coloring and controls shall be in place at the time of shipment to KSC of stages or major modules of the Skylab Space Vehicle. The system shall consist, as a minimum, of the following:

1. Identify all such items and color bright red or orange when practical. Preferred color is number 28913 in Federal Standard No. 595a.

2. When impractical to color an item of nonflight hardware or when the location or size of a colored item does not offer high visibility, a streamer shall be attached to the item or in its immediate vicinity to identify its presence. The streamer shall also be red or orange color and of a size and material compatible with the environment under which it will be used. Streamers are to be fabricated carrying a serialized control number which has traceability to the prescribed system (stage or major module) which identifies and controls the item.

3. Record (by logging) and control the usage and removal of such items. This shall include an inventory of all streamers prior to flight to assure that streamers, as well as nonflight hardware, are removed.

VI. REQUIREMENTS (continued)

4. A record of nonflight hardware installed shall accompany each stage or major module transferred from one location to another.

Failed or nonconforming and MRB hardware shall be treated and controlled in accordance with existing systems. However, when such items are installed as nonflight hardware, they shall be treated per the above requirements.

NOTE: Hardware scheduled for flight, but not yet flight qualified, must be tracked by the responsible Development Center and must be either fully qualified or have flight approval granted at the FRR prior to flight. These items are considered flight hardware for the purposes of this directive.

VII. INSPECTION AND VERIFICATION

The normal quality control system, including surveillance and auditing, shall verify compliance with this directive. Implementation of these requirements shall be described in appropriate Quality Program Plans.

NOV 23 1970

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